

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026020**Date Inspected:** 03-Aug-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>			
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG Trial Assembly				

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 14 West (Partial Height Floor Beam [Next to Anchorage Blocks])

This QA Inspector witnessed final bolt tension verification on bolts connecting splice plate to the partial height floor beam connecting longitudinal diaphragm at work point W3 towards the Edge Beam W17 at PP 126.5(next to the anchorage blocks). Inspected the bolt tensioning on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00735 dated August 03, 2011.

The bolt sizes used were M22 x 70 RC Lot # DHGM220137 and the final torque value established was 400 N-m.

The bolt sizes used were M22 x 95 RC Lot # DHGM220142 and the final torque value established was 367 N-m.

The bolt sizes used were M22 x 90 RC Lot # DHGM220141 and the final torque value established was 353 N-m.

The bolt sizes used were M22 x 110 RC Lot # DHGM220067 and the final torque value established was 500 N-m.

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The Manual Torque wrench used was Serial No. XO2-777.

Please reference the attached pictures for more comprehensive details.

Segment 14 East (Partial Height Floor Beam [Next to Anchorage Blocks])

This QA Inspector witnessed final bolt tension verification on bolts connecting splice plate to the partial height floor beam connecting longitudinal diaphragm at work point E3 towards the Edge Beam E17 at PP 126.5 (next to the anchorage blocks). Inspected the bolt tensioning on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00735 dated August 03, 2011.

The bolt sizes used were M22 x 70 RC Lot # DHGM220137 and the final torque value established was 400 N-m.

The bolt sizes used were M22 x 90 RC Lot # DHGM220141 and the final torque value established was 353 N-m.

The bolt sizes used were M22 x 100 RC Lot # DHGM220049 and the final torque value established was 493 N-m.

The Manual Torque wrench used was Serial No. XO2-777.

Segment 14 East (Anchorage Plate to Edge Beam)

This QA Inspector witnessed final bolt tension verification on bolts connecting Anchorage Plate to the Angle splice plate and Edge Panel to Angle splice plate at FL3 location between PP 125, PP 126 and PP 127. Inspected the bolt tensioning on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00735 dated August 03, 2011.

The bolt sizes used were M22 x 70 RC Lot # DHGM220137 and the final torque value established was 400 N-m.

The bolt sizes used were M22 x 80 RC Lot # DHGM220140 and the final torque value established was 380 N-m.

The Manual Torque wrench used was Serial No. XO2-600.

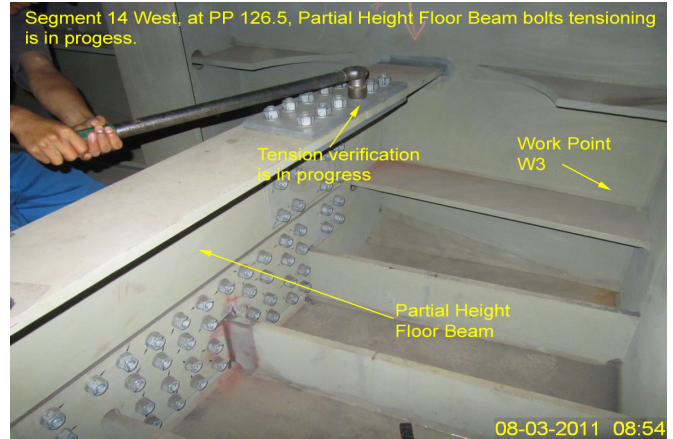
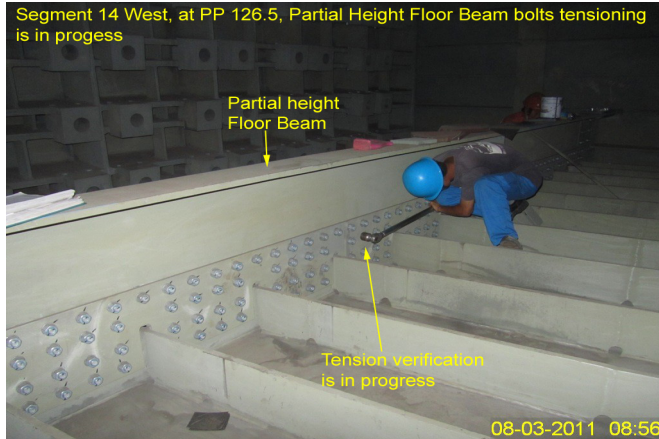
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

No relevant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Math,Manjunath

Quality Assurance Inspector

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**Reviewed By:** Miller,Mark

QA Reviewer